Consumers' Post-purchase Regret Determinants in Sri Lankan Shopping Malls

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

Aims: This study aims to find the factors affecting post-purchase regret at shopping malls in Sri Lanka. Marketing needs better recognition of customer behavior decisions. The importance of this study is to find the gaps in customer expectations and what malls actually deliver. It also aims to identify ways to create the best possible post-purchase customer experience.
Study design: Factors considered in this study have framed the number of alternatives forgone, the return process experience at mall shop, the self-esteem, and risk-aversion of the consumer.
Place and duration of study: People who have shopped at malls during the year 2020 were chosen via an online survey, and 369 responses were collected concerning the period mentioned above.
Methodology: A questionnaire was used to gather data, and its reliability has been tested with Pearson Product-Moment values and reliability measured via a factor analysis using SPSS application.
Results: The results indicated that the number of alternatives forgone, return procedure of the mall shop, and the consumers' self-esteem positively associated with post-purchase regret. At the same time, risk-aversion shows a negative relationship with post-purchase regret.
Conclusion: The number of alternatives is the most significant factor that relates to post-purchase regret. To lower the regret of alternatives forgone, mall shop managers must look into customer's

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preferences. It is better to cluster the loyal and non-loyal customers in a long time. The number of options showcase in the mall must be limited, but with a sense of marketing. To decrease dissatisfaction with the return procedure, one should enhance the services behind the return procedure and provide correct directions. Risk aversion is negatively proportional to post-purchase regret.

1. INTRODUCTION

Customers can be defined as who buy things from the available market to fulfil their need and wants. They are identified as the most important assets for any organization. As a result, firms are adopting many retention strategies to hold them within the organization since they are the main source of firms' profitability. If the firm can retain them by making them loyal to the company, it will help firms reach a consistent revenue source via repeat buying and buying more from the same product [1]. With that, loyalty has become an essential strategic objective almost in all organizations. The main factor underlying customer loyalty is satisfaction which denotes a measurement through a comparison between customer expectation and the perceived performance of a product or a service. In other words, satisfaction is the consumer's response to product or service level of fulfilment [2]. Though customer satisfaction varies from person to person and is difficult to measure due to its intangible nature, it is a very commonly considered factor in the marketing field to measure the success of the firms' offering. On the other hand, the satisfaction level is the prominent factor that affects post-purchase behavior. As customer loyalty leads to repurchase intentions, low customer satisfaction leads to no repurchase intention [3].

To bring greater experience to customers, concept call "shopping malls" clustered with a significant number of retail stores was originated in the 19th century in U.S. [4], and drastic growth was noted in Asian continent in the 20th century. Usually, shopping malls are equipped with modern technology, and apart from shopping stores, these complexes were facilitated with restaurants, parking areas, etc., to bring more fabulous entertainment to the visitors. The diversity of supportive actions provided by the malls was the leading cause for customer attraction. With that, the trend of mall shopping has arisen, and at the present marketplace, a massive demand for shopping malls can be noted. Large shopping malls' growth depends on the size of the customer segment in highly populated urban areas [5]. Developers attract customers for malls to have the experience of buying everything in one place [6]. Currently, society is seeking a shopping experience at shopping malls that are much more convenient and comfortable than traditional retail shops. "Not only can visitors consume products and services in a variety of ways within the mall, but the mall itself offers an experience that is consumable" [6]. As a result of embedded facilities in the shopping experience, retailers charge a premium price for products available at these centres.

In Sri Lanka, the retail sector has evolved to a more significant opportunity. Rapid urbanization is the leading cause of this change. Modern convenience stores, hypermarkets, and malls have a substantial share of these retail sectors. One key point of establishing shopping malls is to take the attraction of tourists. Apart from capital, in other major cities, the retention period of tourists is somewhat low [7]. Therefore, the government of Sri Lanka is also focusing on developing shopping areas for visitors to engage their time in a relaxing environment. Subsequently, these shopping malls align with signs of the concentration of trade. Mall shopping has become a lifestyle, and attractions for these malls have increased by the number of mall activities available [6]. As per Paul [8], there's a growth of shopping malls than retail shops because of the availability of the latest brands and products at discounted prices. Shopping complexes are not only for shopping purposes but also to gather and spend some time. According to the research of Kavitha [9], 90% of the respondents purchased goods from the mall, not for their daily usage, but products like clothes, shoes, and electronic equipment. It implies that they shop at malls to seek product varieties. According to recent Real Estate consultancy Jones LaSalle (JLL), Asia Pacific countries move towards luxury retailing [10]. Sri Lanka moved towards mall shopping in the early 1980s with the opening of the first Shopping Complex in the country's capital. At present, several developments are taking place in major

cities with the adoption of this phenomenon. Although mall shopping is still progressing, it has become a lifestyle fashion for many people. Although there is a massive wave of mall shop development in Sri Lanka, some malls have failed to reach the desired level of economic benefits primarily due to the negative experience or regret that consumers encountered.

Encompassing both negative affect and a counterfactual thought of a customer can be identified as regret [11]. Moreover, regret directly affects the satisfaction and purchase intention of a customer [12]. In other words, it was evident that regret arises as a consequence of dissatisfaction [11]. Many factors related to consumer post-purchase regrets can be identified in the literature since regrets are directly related to customer satisfaction. Regret decreases consumer satisfaction, and negative emotion has an indirect effect on consumer satisfaction [13,14]. It is distinct from related other specific emotions that can be expressed about past and future decisions [13]. Usually, anticipated regret is experienced when decisions are complex and crucial. With the drop in satisfaction level, customers may switch their brand preferences [14]. Also, they may share negatives on company offerings which ultimately cause a refusal among the community. As a result, it is essential for all the organization concern about customer regrets. Regret aligns with the wrong judgments and choices or affordability of a product/service [15]. The prior probability of a consumer's wrong choice is directly proportional to the post-purchase regret of that consumer [16]. According to Park and Hill [17], cognitive effort and justification are essential in lowering regret.

As per the quantitative study conducted by Moakhar et al. [18], post-purchase regret is affected by one's feeling of responsibility, reversibility, the number of alternatives, and lacking self-esteem directly. But, since regret is a cognitive recognition, qualitative approaches like interviews can change the variable effects. According to the research done by Ekici and Dogan [19], it was confirmed that there's a positive relationship between regret concerning life and post-purchase levels. Post-purchase regret can significantly affect customer retention. Moreover, many cognitive factors also affect post-purchase regret. The self-esteem of a person is a crucial cognitive factor that is hard to control externally. According to Rosenberg [20], self-esteem is about accepting themselves

positively. Self-blame/self-disgust tends to have post-purchase regret. Another study has acknowledged a positive relationship between post-purchase regret and the factors of perceived self-responsibility [21]. In other words, one might feel guilty about a decision that they took after purchasing from a shopping mall, because no one is there to be blamed for the action.

The number of alternative forgone is a crucial factor that can be identified as an influential factor to consumer regrets. An alternative that appears with the action of choosing one over the other is another possibility of choice. The number of options at shopping malls increases the excitement of shoppers, which causes a positive impact on emotions [22]. As a result, the number of alternatives has a significant effect on post-purchase regret [18]. In some cases, a positive relationship between post-purchase regret and forgone alternatives has also been identified [21]. When there are a higher number of options, customers get the advantage of choosing the best by evaluating many options [23]. But, in contrast, Schwartz et al. [24] have stated that having a large variety of options leads to the incapability of choosing the best option. Concerning the above-discussed literature, the following hypothesis was developed to address the contrast in the Sri Lankan context.

H_1: Number of alternatives positively affects post-purchase regret at shopping malls in Sri Lanka.

On the other hand, product returns that can always be seen as nuisances are another factor where regret mostly appears. Product returns can be either controllable returns or non-controllable returns [25]. Narayan et al. [26] have classified return procedures with time leniency, monetary leniency, effort leniency, scope leniency, and exchange leniency. Moakhar et al. [18] have investigated regret determinants of post-purchase behavior, and the results indicated that post-purchase regret is directly affected by reversibility. The returning might either provide an opportunity to look for a better choice or a refund. As per Moakhar et al. [18], reversibility decreases the post-purchase regret, and many cognitive factors are strongly correlated with the product reversibility. As a result, firms focus on the return procedure is vital since it can lead customers to revisit the shop [27]. Though the sales can be increased by having simplified return policies, it may also increase the total number of returns [28]. This literature leads to build the following hypothesis.

H₂: Return Process experience positively influences the post-purchase regret at shopping malls in Sri Lanka.

According to consumer behavior, self-esteem bonded with the societal background and social position correlates with levels of self-esteem [29]. Less and discontinuous consideration of social and self-esteem related cognitive factors was noted in research in the retail sector. The originality of self-esteem begins with the family itself. However, society and the person's perception can vary according to the situation and time consideration. According to past studies, the social comparison indicates a strong positive influence on post-purchase regret [18]. This implies a direct implication on the self-esteem of that person. Therefore, the necessity of further analysis of self-esteem in the shopping mall context is a huge step to enhance mall shopping culture. Self-Esteem relates to a level of like yourself and appreciates yourself. Application of consumer behavior is the self-satisfaction about a product or service. A low level of self-esteem indicates a significant impact on post-purchase regret [18]. Similarly, ones' ignorance of self-confidence can lead to having post-purchase regret [13]. According to the above discussion, the following hypothesis was developed.

H₃: Self-Esteem positively influences the post-purchase regret at shopping malls in Sri Lanka.

On the other hand, risk attitude is a very supportive factor when dealing with risky transactions [30]. Risk aversion is the willingness to accept the risk against a decision when there's uncertainty about the outcome [31]. People face risk aversion according to their understanding of the situation. Regret aversion is distinct from risk aversion and it independently influences behavioral decisions [13]. A more open experience leads to a higher regret aversion bias level, especially retired or unemployed females [32]. The matter is, does risk-aversion permanently alter in a positive manner in all countries? Does it vary according to the region? Rai and Kimmel [21] have stated that the higher the level of risk aversion, the higher the effect of post-purchase regret. In the same study, women have shown a greater attitudinal risk aversion, and behavioural risk aversion was determined by ones' marital status and household finances. Thus, the risk-aversion of a customer may necessarily lead that person to think deeply before making a decision. The likelihood of a

person taking a wrong decision after a comprehensive evaluation is somewhat low. Then the post-purchase regret should obviously proceed to a lower regret level. However, the contrasting argument has been noted by the study findings of Rai and Kimmel [21]. Thus, the study extended the analysis of risk-aversion and post-purchase regret relationships, and the following hypothesis was designed to identify their implications.

H₄: Aversion to risk positively influences the post-purchase regret at shopping malls in Sri Lanka.

Though customers always have higher expectations, they are always unsure about the product and the quality of their initial purchase. If that bounds with regret, it may vastly decrease the sales of the shopping complex and the company's popularity. Thus, marketing needs better recognition of customer behaviour and their decisions. As a result, this study was designed to understand the implications of post-purchase regrets at shopping malls in Sri Lanka. Identifying gaps in customer expectations and their perception of perceived performance at shopping malls is vital to adopt possible strategies to create the best possible post-purchase customer experience. Ultimately, this study aims to make recommendations to enhance the mall shopping experience in Sri Lanka by identifying the severity of post-purchase regret determinants.

Most of the studies related to post-purchase regret analysis were focused on factor analysis. This study expands the investigation as a model fitting with selected rarely concerning factors hypothesized to affect post-purchase regret at shopping malls. Since the risk-aversion factor effectiveness has resulted differently in different regions, this study focus to examine the risk-aversion effect in the Sri Lankan context. On the other hand, with the advancement of technology, people tend to move online platforms rather than visiting shopping malls. This has led mall managers and developers to find alternative methods to make customers excited about a product by enhancing the customer buying experience in shopping malls.

2. METHODOLOGY

For this study, primary data were obtained by conducting an online survey targeting the customers who shop at shopping malls in Sri Lanka during the year 2020. For this purpose, a

structured questionnaire was developed, including close-ended questions. The development of measurement constructs for the selected variable namely; post-purchase regret, number of alternatives forgone, return process experience, self-esteem, and risk aversion, was mainly based on past studies conducted in a similar field of studies. For the variables post-purchase regret and number of alternatives forgone, measurement constructs were derived primarily referring to the study carried out by Chen et al. [33]. Four items consisting of return process experience measurement were obtained from Pei's survey [27]. The self-esteem construct was developed by referring to the well-known scale developed by Rosenberg [20]. Finally, the risk aversion construct was adopted from the study done by Mandrik and Bao [34]. The five-point Likert scale ranging from "strongly disagree" to "strongly agree" was used for each measuring item to gather information. The measurement scales for the selected variables, namely; regret, alternatives foregone, return process experience, self-esteem, and risk aversion, were developed by referring to previously validated questionnaires. The designed questionnaire was translated to Sinhala (local language) as well to make it understandable for the community. A pilot test was carried out to find the understandability of the questionnaire for the respondents. Based on that, further alterations were made. According to the literature review and hypotheses, the proposed model is shown below Fig. 1.

The target group for this study was selected by following the convenience sampling method. The maximum amount of reachable customers was chosen to minimize the sampling technique error as the sample size. A total of 475 responses were collected, and among them, 101 responses were ignored, considering non-shopping mall experience within the year considered. Another five responses were removed by identifying them as careless responses. It was done by calculating response biasness. Finally, 369 responses were taken for the study analysis. As an initial step, validity and reliability tests were performed. To test the designed research hypotheses, the multiple linear regression analysis techniques were mainly employed. One part of the questionnaire was designed to take respondent's socio-demographic details.

The final sample consists of a total of 43.6% male respondents and 56.4% of female respondents. In terms of respondent age, 49.9% represent the age category of 21-30, while 3.3% represent age below 20. The majority of the respondents were single and represented 55.6% of the sample, and 44.4% were married. In terms of education, 54.2% of respondents have gained the bachelor's degree qualification as the highest educational qualification, while 23.66% of respondents have post-graduate qualifications. Among the respondents, 35% are having a monthly income of less than Rs. 20,000 or using parents' money while 13.6% have a gain of more than Rs. 100,000 per month. In terms of current careers, 30.1% of the sample was represented by students, and 23% were public sector employees.
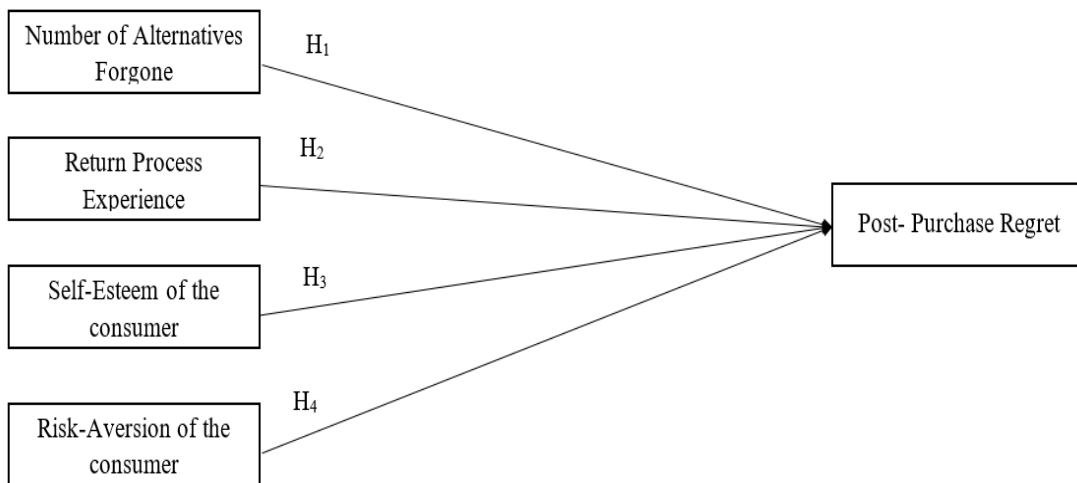

Fig. 1. Study proposed model

3. RESULTS

In the data analysis, initially, the internal consistency of the sample was checked using Exploratory Factor Analysis (EFA) for all the measurement scales in the questionnaire. For the scale used, maximum likelihood factoring estimation was carried out via Promax rotation. Results reveal the availability of five dimensions in the sample. The lowest extraction weight was 0.309, indicating slight insignificance. But the particular item in the risk aversion scale has not been eliminated since the scale was taken from a previously validated study. Kaiser-Mayer-Olkin (KMO) value revealed that sampling adequacy is .871, which means 87.1% of strong sampling

adequacy is present. Further, a significant value was obtained for the Bartlett test. The model has explained 61.098% total variance from the selected factors. Table 1 shows the pattern matrix which was generated through the factor analysis.

After eliminating the items rejected from the pattern matrix of factor analysis, the reliability test was performed by observing Cronbach's alpha value and the analysis results given in Table 2. A sound reliability level is indicated by Cronbach's alpha of .70-.95. Thus an acceptable reliability level was obtained for all the variables studied.

Table 1. Pattern matrix of factor analysis

		Factor				
		1	**2**	**3**	**4**	**5**
RP3	I believe that product return procedures are very complex at this store	.941				
RP2	It was complicated to do product returns at the store	.897				
RP4	I believe that it is somewhat hard to return the product at this store	.784				
RP1	I felt that the return procedure at the store was cumbersome to deal with	.693				
SE6	I don't take a positive attitude toward myself		.941			
SE7	On the whole, I am not satisfied with myself		.706			
SE4	I am not able to do things as well as most other people		.429			
SE5	I feel I do not have much to be proud of		.384			
SE1	I don't feel that I'm a person of worth, at least on an equal par with others		.375			
SE10	At times I think I am no good at all		.359			
A2	I think this product is not the best choice among alternatives			.759		
A3	I suppose that I missed a product which is better than the bought one			.724		
A1	I believe that an unchosen alternative is better than the bought product			.606		
R2	I should have chosen another product/service				.850	
R3	I would make a different decision if I have one more chance				.663	
R1	I feel sorry for choosing this product/service				.375	
RA3	Before I make a decision, I like to be absolutely sure how things will turn out					.733
RA4	I avoid situations that have uncertain outcomes					.685
RA2	I prefer situations that have foreseeable outcomes					.491
RA5	I feel nervous when I have to make decisions in uncertain situations					.422
RA1	I do not feel comfortable about taking chances					.309

Table 2. Cronbach's alpha values

Factors	Number of Items	Cronbach's alpha
R (Regret)	3	.731
A (No: of Alternatives)	3	.793
RP (Behavior with Return Procedure)	4	.822
SE (Self- Esteem)	10	.722

Testing the validity of the survey was done by employing the Pearson Product Moment Correlations (r), which tests by correlating each question score with the total score. According to the Pearson Product Moment Correlation Coefficient table, all the rxy values showed a value more than the r-value (.097824), indicating all the question items are valid. Also, all the instruments were declared significant by resulting in (P =.05) significant values.

Prior to the regression analysis, residuals should be normally distributed. For this purpose, a normal probability plot was used, as shown in Fig. 2. It was identified that existing points follow a straight diagonal line and have very few deviations. Therefore, it was concluded that the residuals are normally distributed.

To identify similarities between independent variables, the multicollinearity test was employed using VIF values. The test result has been given in Table 3. Based on the coefficient result of collinearity statistics, VIF values for all the variables were less than 3, resulting no multicollinearity issues.

Multiple linear regression models need a linear relationship between the independent variables and dependent variable. A scatter plot diagram was generated to identify the linear association, and output was given in Fig. 3. The diagram suggests a relationship between regressions standardized predicted value and standardized residuals. It shows that all the spots are diffused with no specific pattern. Thus, it can be concluded that the residuals are random with constant variance.
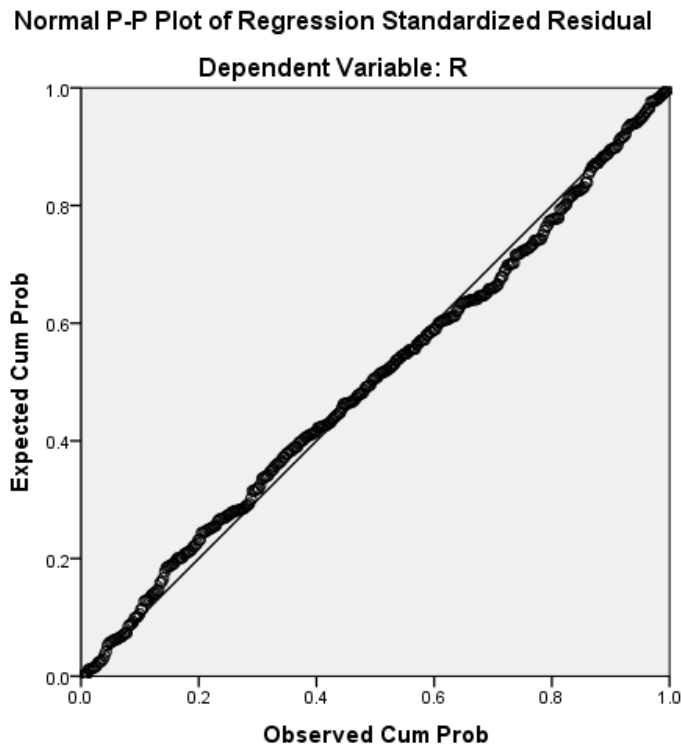
Normal P-P Plot of Regression Standardized Residual

Dependent Variable: R

Fig. 2. Normal probability plot of regression standardized residual

Table 3. Multicollinearity test -VIF values

Model Parameter	Collinearity Statistics	
	Tolerance	VIF
Alternatives (A)	.358	2.790
Return Process Experience (RP)	.480	2.082
Self-Esteem (SE)	.525	1.905
Risk Aversion (RA)	.707	1.414

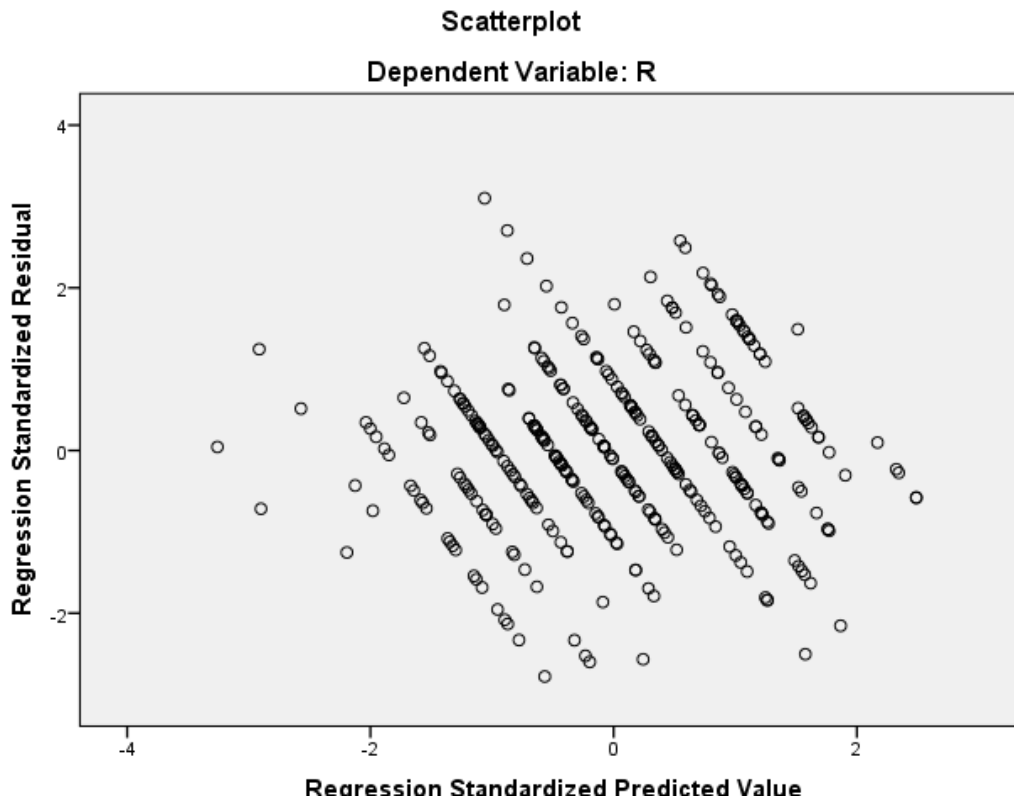## Scatterplot
Dependent Variable: R

Fig. 3. Scatter diagram between regressions standardized predicted value & standardized residuals

As the next step, outlier detection was performed, and three cases were identified using Cook's residual value. Implications of those cases were measured and noted that they are not influencing to predict output accurately.In Multiple Linear Regression Model fitting, first, the ANOVA table suggests the relationship between all the independent variables considered in the study on the chosen dependent variable. The test result has been shown in Table 4.
Hypothesis;

H_0: All coefficients are equal to zero ($\beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$)

H_1: At least one coefficient is not equal to zero ($\beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq 0$)

Significant level (α) = .05

When interpreting the ANOVA table, it is visible that the significant value is .000, a value below .05. Therefore, the null hypothesis is rejected at a 95% confidence level. It has been concluded that at least one of the independent variables can be used to predict the dependent variable.

Moreover, model adequacy (model fit) is measured by R^2 value (resulted coefficient of determination), ranging from -1 to +1. The resulted R^2 value is .78. Therefore, it can be concluded that 78% of the total variation in consumer post-purchase regret in shopping malls can be explained by the independent variables considered in the model. Since the model has an R^2 value of +.78, it can be concluded that the model has a strong positive relationship among the variables. Further, the Durbin Watson value of 1.841, which is around 2, indicates the non-existence of autocorrelation.

Since all the assumptions were met, the model coefficients were analyzed. The resulted model coefficients are given in Table 5.

Hypothesis;

H_0: Coefficient is equal to zero ($\beta_i = 0$)

H_1: Coefficient is not equal to zero ($\beta_i \neq 0$)

(β_i = ith regression coefficient for i=1,2,3,4)

Table 4. ANOVA table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	188.213	4	47.053	322.251	.000[b]
	Residual	53.149	364	.146		
	Total	241.363	368			

Table 5. Coefficients of the model variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.282	.178		7.217	.000
	Alternatives	.419	.038	.418	11.126	.000
	Return Procedure	.209	.036	.200	5.752	.000
	Self-Esteem	.265	.042	.212	6.326	.000
	Risk Aversion	-.270	.030	-.253	-8.970	.000

When *P*-value is less than .05, the null hypothesis can be rejected at a 95% confidence level. That means the coefficients are not equal to zero. All the variables in Table 4 have a *P*-value less than .05, so coefficients are non-zero. Therefore all the hypotheses are accepted as they all are significant at a 95% level of confidence. Accordingly, the number of alternatives forgone, return process experience, the self-esteem of the consumer, and risk aversion of the consumer can be identified as factors affecting the consumer post-purchase regret. Further, the recognized multiple regression model can be noted as;

Consumer Post-purchase Regret = 1.282 + 0.419 (A) + 0.209 (RP) + 0.265 (SE) − 0.270 (RA)

(A: Number of alternatives forgone, RP: Return Procedure, SE: Self-Esteem, RA: Risk Aversion)

When ranking with the severity, the most affected factor for the consumer regret was "number of alternatives forgone". The second strongest influence resulted from risk-aversion. The consumer's self-esteem ranked as the third influential factor, and return process experience influenced with a minimum severity.

4. DISCUSSION

4.1 The Number of Alternatives Forgone Positively Affects the Consumer Post-purchase Regret at Shopping Malls in Sri Lanka

The number of alternatives does not only matters with choosing the best product among alternatives. It is also using in our day-to-day life decisions. For instance, choosing the partner of your life can be considered. As per Fehr [35], it may lead to regret on a forgone alternative if a person lost someone over another person. In consumer decision-making, consumers are caught with post-purchase regr*et al*ternatives because they cannot turn back time. Alternatives provide a lack of courage about a decision made. According to Moakhar et al. [18], the number of alternatives positively affect post-purchase regret. In shopping malls, for each of the products consumers buy, there are more than about two options to choose from. After purchase, one might have the regret of losing the best choice over another. The current study supports the finding of Moakhar *et al*. [18].

4.2 Risk-aversion Negatively Affects the Consumer Post-purchase Regret at Shopping Malls in Sri Lanka

Risk-averse emerges with the ability to accept the risk of a decision. There's a strong correlation between risk aversion and regret [13]. When risk aversion is high, regret leads to be lower. This is also found by Dijk and Zeelenberg [36] and Zeelenberg et al. [37], as people usually are risk-averse. As per Heenkenda and Chandrakumarav [38], the risk-aversion differentiation exists with rural, urban and suburban areas. There's no effect of risk aversion on consumer post-purchase regret [18]. With the current study, in the Sri Lankan context, this makes a contradiction. The most significant reason for this is the country-wise economic diversity. Most of the state people are having low income than urban areas in Sri Lanka. Same has discovered by Zeelenberg et al. [37].

4.3 Self-esteem Positively Affects the Consumer Post-purchase Regret at Shopping Malls in Sri Lanka

As concluded by Mahmood et al. [39], personality traits exhibit a positive relationship with purchase decisions. As per Zeelenberg and Pieters [13], Self-Esteem and regret strongly correlate. Accordingly, the current study findings conclude that the self-esteem of a person necessarily affects post-purchase regret. According to Sarsani [40], self-concept, which is mostly related to self-esteem is low with government school students and high with private school students. That can be noted where social connections affect self-esteem. Students who enrolled on private education may get financial assistance from their parents, which may cause the development of self-esteem levels with them. Therefore, low self-esteemed people tend to protect their self-esteem when they make a purchase decision. This was also noted by Zeelenberg et al. [37] as regret leads to a threat of a decision-maker and it affects the self-esteem of that person.

4.4 Return Process Experience Positively Affects the Consumer Post-purchase Regret at Shopping Malls in Sri Lanka

Many retail sector stores provide return policies to customers to solve the regret that occurs with their buying decisions. These returns happen due to dissatisfaction with a product or to find a replacement with that person's favourite option. There's a restocking fee for each return in a firm and that's why the retail stores do returns for the same priced alternative for the purchased product price. The mathematical formulation for the restocking fee has been presented by Zou et al. [16], which interprets that a consumer can potentially reduce his/her post-purchase regret by paying the restocking fee for the return and buy the best matching product for him/her. When there's a high valuation uncertainty, cognitive dissonance is a crucial point to study post-purchase behavior. As per Mollenkopf et al. [41], effort leniency increases the return procedure satisfaction with the customer while decreasing anticipated regret. As per Rajagopal et al. [42], regret increases with more consideration of the product purchased. Accordingly, the current study results, the more the customer dissatisfied with the return process, the more they feel regret.

5. CONCLUSION

Post-purchase behavior is a crucial element of marketing to rearrange things to meet customer expectation levels. Marketers anchor this post-purchase evaluation to retain customers and deliver good word of mouth about the product/service in society as it is necessary to create a path for the firm's success. The study evaluated four key factors. First, it was hypothesized that the number of alternatives forgone, return procedure of the mall shop, risk-aversion, and self-esteem of the consumer leads to the post-purchase regret at shopping malls in Sri Lanka. And it was found that all the hypotheses were acceptable.

A contradiction with the study of Moakhar et al. [18] was found as they have concluded that the risk-aversion does not relate to post-purchase regret. Still, this study findings confirm the implication of risk-aversion on post-purchase regret. The social differences due to the different geographical locations might be caused for this variance. People in the lower-middle-income category tend to spend money precisely and more carefully. According to the study results, it's clear that the return procedure of the mall shop is somewhat stationary. The way to enrich the satisfaction with the return procedure is to aid the activities related to the return procedure. An online method for returning a product is a positive concern regard to this matter. The mall shop can provide the facility of online return once they register for the loyalty management system of the mall shop. With that, firms can enable customers to view transaction history as well.

There are non-controllable factors as well when considering post-purchase behavior. One might feel dissatisfaction easily, according to their expectation level regard to money spent on the product. To reduce the impact, the mall shoppers must assign trained staff to enable customers to meet their expectations. Otherwise, customer dissatisfaction may lead to stop visiting the mall.

To lower the regret of alternatives forgone, mall shop managers must look into customer's preferences. It is better to cluster the loyal and non-loyal customers in a long time. It may help to understand the trends, fashion, or necessities of each customer cluster. The number of options showcase in the mall must be limited, but with a sense of marketing. The first step is to hire the best staff and train them to understand customer needs and expectations. It is vital to show the best available offering considering the budget of

the customer. Sales staff can provide support in decision making as well, by giving extra information on product specifications, previous customer feedbacks, and worthiness. Further, firms can organize their offerings as per the price level from one corner to another to make it easy for the customer to search according to their budget. Such application may also affect to lowers the regret due to alternative forgone.

The return procedure is another influential factor identified which is not possible to control easily. The only way to decrease dissatisfaction with the return procedure is to enhance the services behind the return procedure. It is better to provide correct directions or return policies when they purchase the product in the first place. Filling the stations near the counter with frequently buying items can reduce the regret with returning, if they remain with some amount to cover previously purchased product price. When customers need to pay more to buy an exceptional product to cover the due amount, it can recommend deducting the remaining amount from loyalty points if they agree on it with the availability of an implemented loyalty scheme.

It is obvious to maintain an evaluation mechanism for customer complaints to enhance the satisfaction level in the long run. Such implementation may facilitate the management to understand the areas to be developed with post-purchase regret evaluation. Additionally, companies must adopt devices or any interior design to adjust the personality and self-esteem of customers. Because a regret happened through one mall shop can influence the overall image of the mall itself. The staff must take ownership of customer issues with a product or decision and stay professional always. Asking the feedback of the customer can enhance the confidence of the customer about a purchase.

As the future directives based on this study, it is suggested to apply behavioral elements and study the relationship with those variables since this study focused on cognitive factors that affect post-purchase regret. The study can be further improved by analyzing the relationship between post-purchase regret and mall experience with arousal factors related to mall environment and visual perceptions. Further extensions can be done with how it can affect the loyalty of the consumer. The study used convenient sampling as the sampling method. A probabilistic sampling method considering regional effects would be a better sampling technique for the precise understanding of behaviours of the consumer at

shopping malls. With that, the acceptability of current findings can be increased. Almost all the moderating effects are encouraged to analyze in future studies due to the possible moderating outcomes with the cultural and regional changes. Finally, this study was done during the COVID-19 period in Sri Lanka. And it is suggested to survey the post-COVID situation on mall shopping and customer satisfaction as well.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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